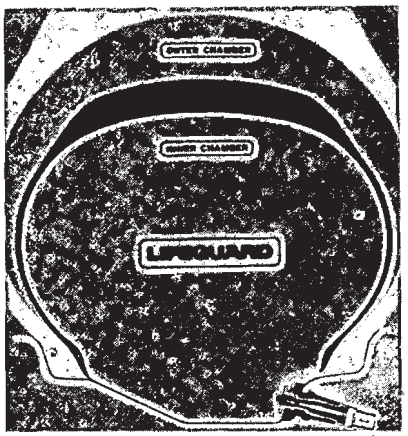
PART 11-03 Tires

COMPONENT INDEX Applies To Models As Indicated	All Models		Mercury	Meteor	Cougar	Fairlane	Falcon	Maverick	Mustang	Montego	Lincoln-Continental	Thunderbird	Continental-Mark III
HOISTING INSTRUCTIONS	03-01												
TIRES (CONVENTIONAL)													
Mounting	03-02												
Removal	03-02												
TIRES (LIFE GUARD)													
Balancing		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-01	03-01	03-01
Correcting Vibration and Shake		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-02	03-02	03-02
Description		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-01	03-01	03-01
Installation		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-03	03-03	03-03
Removal		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-03	03-03	03-03
Repairs		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03-04	03-04	03-04

A page number indicates that the item is for the vehicle(s) listed at the head of the column.
N/A indicates that the item is not applicable to the vehicle(s) listed.

1 DESCRIPTION



F 1380 - A

FIG. 1—Life Guard Safety Tire—Sectional View

LIFE GUARD TIRE

The Goodyear Power Cushion Tire (available on Thunderbird, Lincoln and Continental Mark III models) fitted with the Life Guard Safety Spare provides a tire within a tire with two separate air chambers (Fig. 1). If the outer tire casing should be punctured or otherwise damaged causing it to go flat, the Life Guard Safety Spare will carry the load of the vehicle and will allow driving at speeds up to 40 mph with good control up to a distance of 40 miles. A Safety-Signal built into the Life Guard tread produces a lope or vibration indicating the outer tire has lost pressure.

2 IN-VEHICLE ADJUSTMENTS AND REPAIRS

HOISTING INSTRUCTIONS

Damage to steering linkage components and front suspension struts may occur if care is not exercised when positioning the hoist adapters of 2 post hoists prior to lifting the vehicle.

If a 2 post hoist is used to lift the vehicle, place the adapters under the lower arms or the No. 1 crossmember. Do not allow the adapters to contact steering linkage. If the adapters are placed under the crossmember, a piece of wood (2x4x16 inches) should be placed on the hoist channel between the adapters. This will prevent the adapters from damaging the front suspension struts.

BALANCING LIFE GUARD TIRE

Tires fitted with the Life Guard Safety Spare are balanced in the

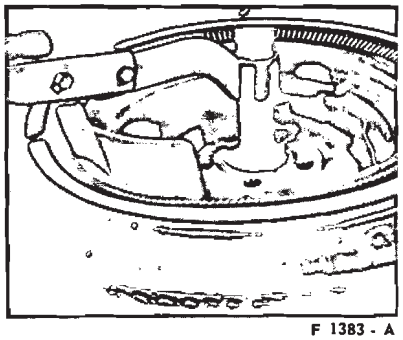

F 1383 - A

FIG. 2—Breaking Top Bead of Tire From Wheel Rim

same manner as conventional tires. If an excessive out of balance condition exists the following procedure can be used to correct the condition:

1. Remove the core housing and deflate both air chambers.
2. Install the core housing.
3. Unseat the beads of tire with the bead breakers away from the valve stem as shown in Fig. 2.
4. Rotate tire casing 90 degrees on the wheel rim.
5. Rotate the tire casing back and forth on the rim to center the valve.
6. Inflate both chambers of the tire following steps 13 through 15 of the Tire Installation procedure.
7. Balance the tire in the normal manner.

CORRECTING VIBRATION AND SHAKE— LIFE GUARD TIRE

The condition of excessive vibration and shake is generally the result of an incorrect pressure relationship between the inner and outer air chambers that may cause the life guard to shift position within the tire. The following procedure should be used to correct vibration and shake conditions:

1. Check pressure of the inner and outer air chambers on all four tires.
2. If the inner chamber has at least five psi more pressure than the outer chamber the pressures should be adjusted and the tires rebalanced if necessary.
3. If the pressures of the inner and outer air chambers are equal the Air Container is leaking. To repair the leaking air container the recommended procedures for the removal, repair of air container, mounting, and balancing should be followed.

3 REMOVAL AND INSTALLATION

HOISTING INSTRUCTIONS

Damage to steering linkage components and front suspension struts may occur if care is not exercised when positioning the hoist adapters of 2 post hoists prior to lifting the vehicle.

If a 2 post hoist is used to lift the vehicle, place the adapters under the lower arms or the No. 1 crossmember. Do not allow the adapters to contact the steering linkage. If the adapters are placed under the crossmember, a piece of wood (2x4x16 inches) should be placed on the hoist channel between the adapters. This will prevent the adapters from damaging the front suspension struts.

REMOVING CONVENTIONAL TIRE FROM WHEEL

The tire can be demounted on a mounting machine. **Be sure that the outer side of the wheel is positioned downward.** If tire irons are used, follow the procedure given here.

1. Remove the valve cap and core, and deflate the tire completely.
2. With a bead loosening tool, break loose the tire side walls from the wheel (Fig. 3).
3. **Position the outer side of the wheel downward,** and insert two tire irons about eight inches apart between the tire inner bead and the back side of the wheel rim. **Use only tire irons with rounded edges or irons designed for removing tubeless tires.**
4. Leave one tire iron in position, and pry the rest of the bead over the rim with the other iron. Take small bites with the iron around the tire in order to avoid damaging the sealing surface of the tire bead.
5. Stand the wheel and tire upright with the tire outer bead in the drop center well at the bottom of the wheel. Insert the tire iron between the bead and the edge of the wheel rim, and pry the wheel out of the tire.

MOUNTING CONVENTIONAL TIRE TO WHEEL

1. If a used tire is being installed remove all dirt from the tire.

If a tire is being mounted to the original wheel, clean the rim with emery cloth or fine steel wool. Check the rim for dents.

If a new wheel is being installed, coat a new valve with RUGLYDE or similar rubber lubricant and position the valve to the new wheel. Use a rubber hammer or a valve replacing tool to seat the valve firmly against the inside of the rim.

2. Apply RUGLYDE or a similar rubber lubricant to the sealing surface on both tire beads. With the outer side of the wheel down, pry the beads over the wheel rim with two tire irons. **Do not use a hammer or mallet**

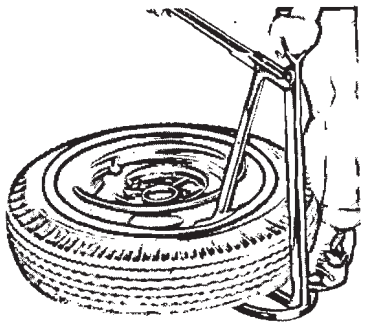

F1424 A

FIG. 3—Bead Loosening Tool

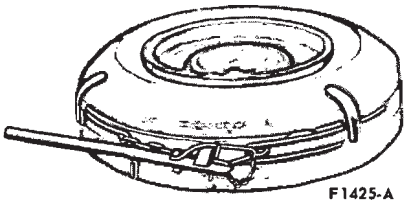

F1425-A

FIG. 4—Tubeless Tire Mounting Band

to force the beads over the rim.

3. Align the balance mark on the tire with the valve on the wheel.
4. Hold the beads against the rim flanges by positioning a tire mounting band over the tire (Fig. 4). If a mounting band is not available, tie a tourniquet of heavy cord around the circumference and in the center of the tire. Tighten the cord with a tire iron.

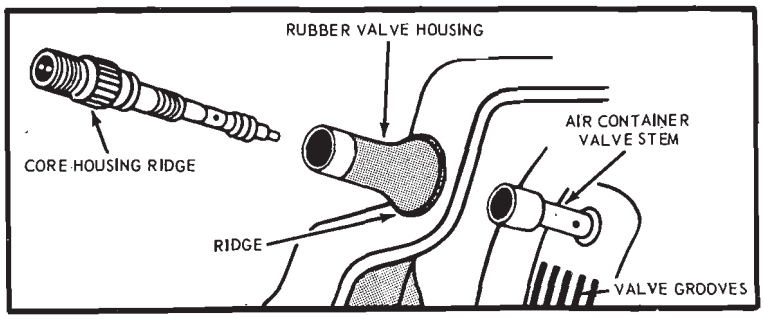


FIG. 5—Core Housing Disassembled

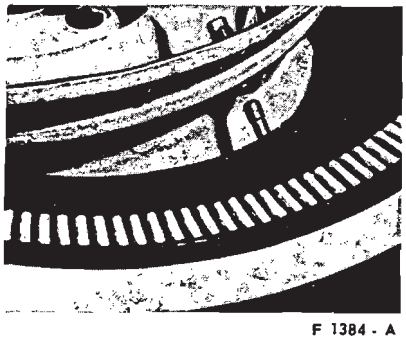


FIG. 6—Removing Air Container Valve Stem

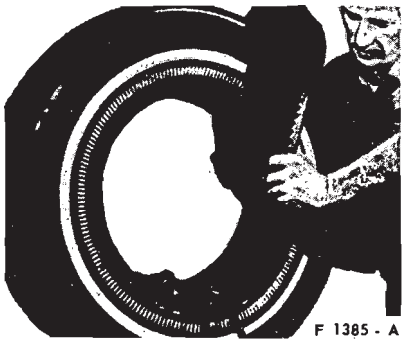


FIG. 7—Folding Life Guard For Installation in Tire

FIG. 8—Aligning Valve with Reference Mark on Tire

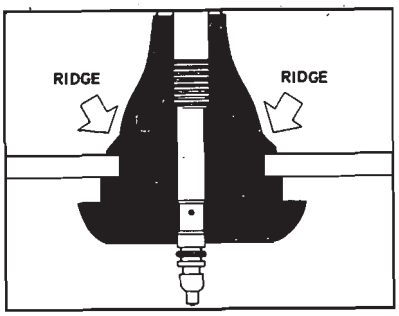


FIG. 9—Valve Installation

Center the tire on the wheel with a rubber mallet.

5. Give the tire a few quick bursts of air to seat the beads properly, then inflate the tire to 40 psi pressure. Check to see that the bead positioning rings (outer rings near the side walls) are evenly visible just above the rim flanges all the way around the tire. If the rings are not even, deflate the tire completely and inflate it again.

6. When the rings are properly positioned, deflate the tire to the recommended pressure.

REMOVING LIFE GUARD TIRE FROM WHEEL

1. Mark the valve stem location on the tire sidewall.
2. Remove the core housing (Fig. 5) and deflate both air chambers.
3. Unseat the beads of the tire with the bead breakers working away from the valve stem (Fig. 2).
4. Starting at the valve stem, work the top bead of the tire over the rim of the wheel.
5. Pull the air container valve stem out of the rubber valve housing (Fig. 6).
6. Remove the air container before attempting to remove the tire from the wheel.
7. Lift the lower bead over the wheel rim to remove the tire.
8. Remove the rubber valve housing from the wheel rim.

INSTALLING LIFE GUARD TIRE ON WHEEL

1. Apply Silicone Lubricant (COAZ-19553-A) as the anti-friction treatment uniformly over the crown and shoulder area inside the tire or outside the life guard.
2. Fold the life guard as shown in Fig. 7.
3. Insert life guard into tire casing.
4. Install a **new** rubber valve housing on the air container valve stem and thread the core housing into place. It is not necessary to install a new core housing.
5. Insert air container into the life guard with the valve grooves to the outboard side of the tire. Place the valve at the valve stem location marked on the sidewall during removal as shown in Fig. 8.
6. Apply a soap solution to the beads and the rubber valve housing.
7. Place the wheel on the mounting machine with the valve hole away from bead breakers. **Remove all burrs and sharp edges from valve hole in rim.**
8. Mount first tire bead exercising care not to pinch air container.
9. Start valve through hole in rim. **Do not pull valve housing into place at this time.**
10. Mount the second bead starting **just past** the valve so the last portion of the bead goes over the rim at the valve.
11. Rotate the tire back and forth to center the valve housing.
12. Pull the valve housing into place. Make certain that the rubber valve ridge is visible around the valve housing (Fig. 9).
13. Tighten the core housing lightly using pliers.
14. Thread the Inflate-Chek adapter onto the core housing.
15. Inflate the inner chamber to seat the tire beads exercising **care not to exceed 45 psi pressure.** Adjust this inner chamber air pressure to 15 psi higher than the recommended tire pressure.
16. Remove the Inflate-Chek adapter and adjust tire (outer chamber) pressure to the recommended pressure.
17. Recheck inner chamber pressure.
18. Install valve cap.

4 MAJOR REPAIR OPERATIONS

HOISTING INSTRUCTIONS

Damage to steering linkage components and front suspension struts may occur if care is not exercised when positioning the hoist adapters of 2 post hoists prior to lifting the vehicle.

If a 2 post hoist is used to lift the vehicle, place the adapters under the lower arms or the No. 1 crossmember. Do not allow the adapters to contact the steering linkage. If the adapters are placed under the crossmember, a piece of wood (2x4x16 inches) should be placed on the hoist channel between the adapters. This will prevent the adapters from damaging the front suspension struts.

LIFE GUARD TIRE REPAIRS

REPAIR OF OUTER TIRE

Outside Repairs

All outside repairs are made in the same manner as on conventional tubeless tires.

Inside Repairs

1. Remove the anti-friction treatment on the inside of the tire with rubber solvent.
2. Buff the inside area of the tire.
3. Apply a hot cure patch **only.**

REPAIR OF AIR CONTAINER

Air containers are repaired in the same manner as conventional inner tubes.

REPAIR OF LIFE GUARD

A damaged life guard that may pinch the air container should be replaced. No repairs are required for small punctures in the life guard.